



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

HA

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,899	05/19/2006	Xiaodong Xu	16CN-X0109	6922
7590	12/03/2007			
Patrick W Rasche Armstrong Teasdale Suite 2600 One Metropolitan Square St Louis, MO 63102			EXAMINER KIKNADZE, IRAKLI	
			ART UNIT 2882	PAPER NUMBER
			MAIL DATE 12/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,899

Applicant(s)

XU, XIAODONG

Examiner

Irakli Kiknadze

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7 and 9 is/are rejected.
- 7) ☒ Claim(s) 2,5 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s).

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/19/2006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

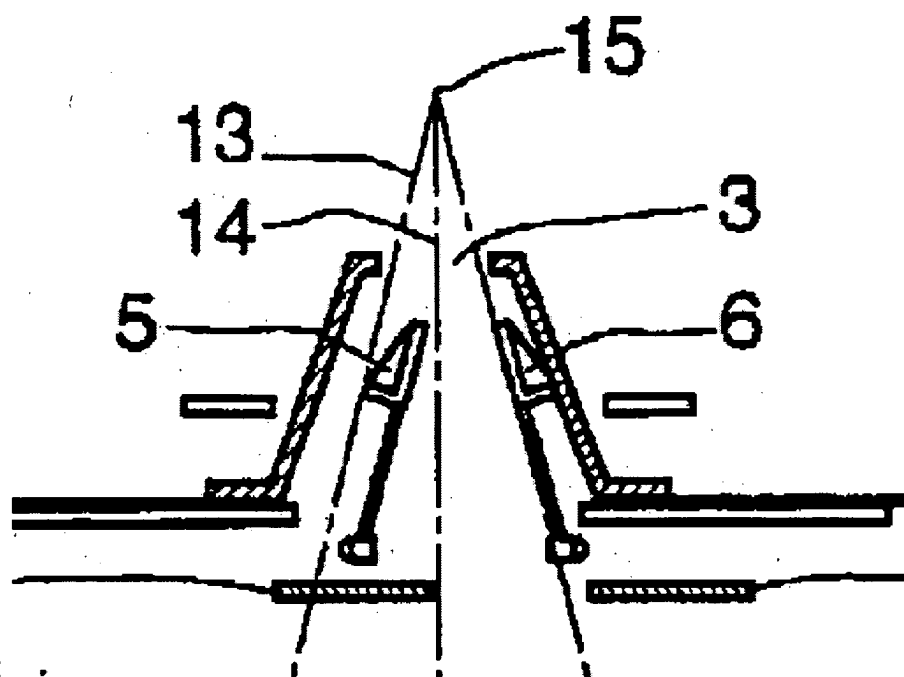
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 6, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sundermann et al. (US Patent 6,850,596 B2).

With respect to claims 1, 4 and 7, Sundermann teaches an X-ray apparatus comprising (Fig. 9): an X-ray tube (60); a collimator (1) for collimating X-ray generated from the X-ray tube (60) and applying the collimated X-ray to an object to be radiographed; and a detector (62) device for detecting the X-ray which has passed through the object to be radiographed (column 5, lines 45-50), the collimator (1)



comprising:

a pair of first

plate members each having X-ray absorbability, movable in a direction parallel to a surface thereof, and defining an X-ray passing aperture a spacing between respective end faces opposed to each other; and a pair of second plate members each having X-ray absorbability, the second plate members, in order to block other X-rays than the X-ray passing through the aperture (see moving plates 5 and 6), being connected at respective one ends by hinges to end portions of the pair of first plate members opposite to the mutually opposed end faces of the first plate members and being supported by respective opposite ends so as to be movable obliquely with respect to the moving direction of the first plate members with movement of the first plate members (Fig. 1; column 3, lines 34-40).

With respect to claims 3, 6 and 9, Sundermann teaches that the pair of first plate members are movable independently of each (Fig. 1; column 3, lines 34-40).

Allowable Subject Matter

3. Claims 2, 5 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: With respect to claims 2, 5 and 8, prior art fails to teach or make obvious an X-ray collimator and X-ray apparatus comprising the X-ray collimator, wherein the opposite ends of the second plate members are supported by guide grooves formed obliquely with respect to the moving direction of the first plate members and pins engaged in the guide grooves in combination with all of the remaining limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is 571-272-2493. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/579,899
Art Unit: 2882

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Irakli Kiknadze
Examiner
Art Unit 2882

IK
November 21, 2007